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An
Inaugural Essay
on
Inversion of the Uterus

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Adam R. Stouch

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An Essay
on

Inversion of the uterus is one of those diseases which is rendered important, more from its alarming nature, than from the frequency of its occurrence; yet it is not sufficiently rare to give us any just ground for withholding from it, that share of attention, which, from its nature it deserves. Some rare diseases are of such a nature as to require no prompt measures for their removal; while others again, from their violence, admit of no delay, and are only to be overcome by immediate applications. A person may commence the practice of medicine without being acquainted with all the minutia of the treatment of the *former*, but without such an acquaintance with the *latter* no one can practice

with credit to himself, or with safety to those confided to his care. Among the former diseases we may enumerate, stone in the bladder, & the diseases of the eye requiring operative aſsistance, generally; and among the latter, hernia & inversion of the uterus: the *former* always admitting of delay, without endangering the life of the patient; and permits us to seek the aid derived from consultations; while succeſs, in the treatment of the *latter*, mainly depends on immediate interference. These observations apply, particularly, to the practice of medicine in the country, where physicians reside at a considerable distance from each other, and, unfortunately, not always qualified to give that kind of aid, which we might expect from their age and standing, as practitioners.

Inversion of the uterus may rather be

regarded as an accident, than a disese. As the term implies, it means a turning of that organ inside out.

The uterus may, be partially, or wholy inverted; which two different conditions are generally designated, by the terms complete and incomplete inversion.

Complete inversion is where the uterus is turned completely inside out; the fundus, most commonly protruding through the os externum; yet it may be wholy concealed within the vagina.

Incomplete inversion may be in different degrees it may have passed half its length through the os uteri, or, it may be completely inverted except a small portion of the body and cervix.

There is a condition of the uterus, which has generally been included under incomplete

inversion; it is where the fundus falls down to the os uteri, but is prevented from paſsing through, by the latter being contracted. It has also been called the diping of the fundus. When the mouth of the uterus is occupied by any portion of the fundus or body, it will, in most instances be found firmly contracting around it, producing a sort of strangulation; though sometimes the entire uterus is in a state of relaxation.

Causes

In the natural unimpregnated state of the uterus inversion cannot take place. The causes, therefore must be of two kinds— those which combine to render the uterus in a state susceptible of being inverted, and those which produce the inversion when it is in that state.

Inversion of the uterus mostly takes place shortly after delivery. The uterus may be brought into a condition susceptible of being inverted, by any cause that will produce a general relaxation of that organ, or dispose it to partial and irregular contraction. These conditions may be brought on by overdistention as from compound pregnancy, or from an exceſs, of liquor amnii; or from one foetus being unusually large; from haemorrhage; from paſsions or emotions of the mind; from exhaustion, the consequence of long continued uterine efforts, or of previous disease &c.

When the uterus is in this condition any force or weight appended to the fundus may produce its inversion. This may be, preſsure of the intestines, from contraction of the abdominal muscles; the placenta itself

when attached to the fundus, from its own weight, or the improper interference of the midwife, by pulling at the cord, before that contraction of the uterus, "which is to expel the placenta, takes place".–

After the uterus has been partially inverted, from some of those causes, its own contraction seems adequate to the completion of the inversion, or, at least has a very considerable tendency to do so, In the first case that Dr Denman ever saw, the uterus was completely inverted with two pains, the first of which also expelled the child, and that too, to a considerable distance. When the first of the two pains expelled the child, he supposed the fundus was brought down by the shortneſs of the funis; though he tells us at the sametime that it was laped twice round

the childs neck, and allowed it to be thrown to the extremity of the bed." Whether or not this short cord was the cause of the partial inversion of which the Doctor speaks, there can be no kind of doubt but what the inversion was completed by the action of the uterus alone. Dr Baillie, in his Morbid anatomy, mentions "the weight of a polypus" as a principal cause of inversion. This I would be inclined to think would only produce a partial inversion, or that dipping of the fundus before alluded to.

Symptoms

After delivery, if the woman complain of severe pain in the region of the uterus, and there are bearing down efforts, with nausea, and symptoms of great debility, manifested by cold clammy sweats, small frequent

pulse, and general langour; we have reason to suspect that inversion of the uterus has taken place. - Combined with these symptoms there is often considerable haemorrhage, and not unfrequently very distreſsing nervous symptoms arise. Dr Dewees thinks those nervous symptoms are probably owing to "the new situation the viscera of the abdomen are forced to take, when deprived of the support of the uterus." These symptoms, though not conclusive evidence that inversion has taken place, are sufficent to lead us to other modes of enquiry. If we place our hand on the hypogastric region, we will not feel that hard round body, which is always to be felt when the uterus is contracting properly; and if we examine per vaginum we will find the vagina occupied by a hard resisting tumour, which is the

fundus of the uterus, and this may be enveloped, by the placenta; or the whole may have paſsed through the os externum, when there can be no difficulty as regards the nature of the accident.

Inversion does not always occur immediately after the birth of the child. There is one case related by Ane', and adverted to, by Mr Burns, where it did not take place until the twelfth day; and it is not uncommon for several hours to elapse before the accident occurs. Incomplete inversion is commonly attended with more haemorrhage than complete. Dr. Dewees explains this fact in the following manner;- "When the inversion is complete the uterus contracts to a certain extent; and, by this contraction the now internal surface of this organ is made to impinge upon the

veſsels which carry blood to it, and thus interrupts or cuts off fresh supplies of this fluid.

Prognosis

Death may take place suddenly from the loſs of blood, even when the inversion is complete; or when this does not take place; inflammation may be excited, which may eventually prove fatal to the patient. If these do not occur the uterus will contract to nearly its natural size and give but little inconvenience to the patient. This is not always the case: sometimes considerable discharges of foetid matter, with frequent debilitating haemorrhages will give rise to hectic, which, after a prolonged suffering, will produce the death of the patient. our chance of restoring the uterus after it has been completely

inverted, or where the fundus and greater part of the body have paſsed through the os uteri, is a very poor one, though it is said that inversion has been spontaneously restored after a lapse of several years; it is explained by "supposing that the tubes pull up the inverted part"! one case of this kind is said to be recorded on the authority of the Nephew of the celebrated Baudelocque.

Diagnosis

Inversion of some standing may be confounded with prolapsus uteri or polypus; but, by careful examination may readily be distinguished from either. In prolapsus we can feel the orifice of the uterus, and the general form will also aſsist in the diagnosis. A polypus is more

moveable, and susceptible of being rolled than an inverted uterus, and we can discover the os uteri embraceing it at the top. By irritating a polypus by scratching &c., on account of its insensibility, the woman does not complain of pain. The shape of a polypus is different from an inverted uterus; the lower extremity being more expanded and the pedicle smaller. An incomplete inversion would be more apt to be mistaken for a polypus, if such a condition of the uterus could remain for any length of time; but the shortneſs of the time the woman has complained, would be a sufficient diagnosis.

Post mortem examinations

Diſsections have shown cases of "diping of the fundus" where no intimation of it was

given during the lifetime of the patient.

The inverted surfaces of the back of the uterus, though lying in contact have not been found adhered together, as might be supposed. Although this is stated as a fact by Dr Denman, I cannot help believing that adhesion of the two opposing surfaces would take place, in case at any time a high degree of inflammation had existed.

Treatment

The indications in the treatment of inversion of the uterus are three: first, to restore the prolapsed fundus when practicable; second, to prevent the uterus from being reinverted; and third, if the fundus cannot be restored," to take off the constriction occasioned by contraction of the mouth of the uterus." The credit of having discovered the only

method by which we can meet this last indication, (though a dreadful resource) is due to Dr. Dewees.

Inversion when discovered early if not quite complete, as a general rule, can be restored. The combination of circumstances which must occur, to allow the fundus to paſs down, will generally allow it to paſs back again, if the attempt be made immediately, or before the os uteri has contracted to any considerable degree.

If no part of the fundus has paſsed through the os uteri, we immediately restore it by paſsing the hand into the uterus, and retaining it there until contraction takes place. If the placenta is detached we bring it away with the hand; but it still adherent, we allow our hand to remain in the uterus until suf-

ficient contraction has taken place to secure the woman against haemorrhage we then gently detach it and bring it away. In a case of this kind, where we cannot by gentle means succeed in forcing the hand through the os uteri, so as to raise up the prolapsed fundus, we will be justified in using a stick covered with some soft substance, for that purpose. If the uterus have escaped from the vagina, it, in the first place, must be restored within it; if it have not, we grasp the tumour in the hand, and endeavour to restore it by pushing it upwards within the mouth of the uterus. We can operate with more effect by pressing the most prominent part of the fundus in the direction of the axis of the os uteri, at the same time. After

we succeed in forcing the fundus through the os uteri. if it do not restore itself by its own elasticity we follow it up with the hand until it is completely restored; nor do we withdraw the hand until contraction have taken place.

If the placenta be adherent it should not be removed until the fundus is restored, and not then as I have before observed, till the uterus shows a disposition to contract. Dr Dewees, observes, that "should we however find much opposition to reduction, and this evidently in part, arising from the bulk of the maſs to be restored, it will (perhaps) be best to separate it carefully, and then carry up the fundus:—" he does not speak positively on this subject, from not having had experience.

It is not probable that complete inversion has ever been restored, even where the attempt has been made immediately after the accident; at least I have seen no well authenticated case; and it is not always poſsible to reinstate it where the inversion is approaching a complete one. Dr. Denman says, "the impoſsibility of replacing it if not done soon after the accident has been proved in several instances to which I have been called, so early as within four hours, and the difficulty will be increased at the expiration of a longer time." Dr. Denman adds to his own experience that of Hunter and Ford. Even with this hopeleſs account before us, we should always attempt reposition after a lapse of many hours, or even days. Mr. White

has stated a case where he reinstated a complete inversion; but Dr Dewees has shown, from Mr Whites own account, that this was a case of incomplete inversion.

When the uterus is restored, the second indication, which is, "preventing a reinversion" is fulfilled, by the horizontal position and rest. What are we to do when the inversion is incomplete, and we cannot succeed in reinstating the uterus? This condition supposes the stricture occasioned by contraction of the mouth of the uterus to be, firm and unyielding, and of course the symptoms violent and alarming severe pains, faintneſs, vomiting, cold sweats, extinct pulse. In such a condition Dr Dewees recommends us, to complete the inversion. This answers the third indication, and as soon as done, the woman is relieved of pain and the other distreſsing

symptoms.— Dr Dewees has succeeded completely in one case; but from that succeſs we are not warranted in resorting to it, until we have been completely foiled in our attempts at restoration. After such failure there can be no doubt as to the propriety of the practice, as the woman inevitably must die if left unrelieved.

A rigid antiphlogistic plan of treatment must now be enjoined, to prevent an exceſsive degree of inflammation from ensuing.

The uterus mostly contracts to its natural size, and remains pendulous within the vagina; and the woman suffers no other inconvenience except barrenneſs. At other times however, it hangs in form of a large tumour without the os externum, between the thighs of the woman, and becomes excoriated and ulcerated; discharging at

the same time large quantities of purulent and mucus matter so as very much to debilitate the patient, and render her life miserable and disgusting to herself.

When the misery of the woman is very great, or the debility from the discharge is alarming, extirpation has been proposed, and in some cases has actually been performed. Paré and Mauriceau cut away the uterus of a woman 30 years old, who survived. Mr Clarke performed the same operation with a ligature on a woman 60 years of age. The ligature required tightening daily, for 12 days before it droped off. The sides of the vagina had adhered so as to prevent the cavity of the abdomen from being exposed. Mr Windsor, who has performed the operation, prefers excision with the knife, to the ligature; but, previous to performing the opera-

tion, recommends the application of a ligature, to secure the adhesion of the sides of the vagina. This operation should never be performed, except in those cases, where death inevitably would soon be the consequence of the increasing debility of the patient.—

In the preceding pages I have endeavoured to give a correct account of one of the most terrible accidents encountered in the practice of Midwifery; how far I have succeeded is for abler judges to determine for the manner in which it is done, I, at least, claim the indulgence due to one unaccustomed to writing.—

Adam R. Stouch